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FMPC SITEWIDE RI/FS SEPTEMBER 1987 MONTHLY TECHNICAL PROGRESS REPORTS

09/01/87

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ENCLOSURE

FMPC SITEWIDE RI/FS
SEPTEMBER 1987
MONTHLY TECHNICAL PROGRESS REPORTS

STATUS

General

Progressive actions have continued on the FMPC sitewide RI/FS. Two drilling rigs were mobilized and drilling was commenced on August 17, 1987. In addition, the biological sampling (on 8-24-87) and the radiation measurement programs (on 8-26-87) were also initiated.

The USEPA and OEPA comments on the draft Work Plan were addressed and responses issued in four volumes (1) Revised Work Plan Volume (2) Comment Responses to USEPA (3) Comment Responses to OEPA, and (4) Change Page Notices. These volumes were transmitted to USEPA and OEPA on August 24, 1987.

Task 1 - Description of Current Situation

Final comments on the "Description of the Current Situation" were issued by USEPA on June 24, 1987. The document is currently being updated to address these comments and to include results of the waste pit characterization study.

Percent Complete:
- Original Deliverable - Complete
- Comment Response - 55%
- Revised Deliverable - 15%

Task 2 - RI Work Plan Requirements

The USEPA and OEPA comments on the draft Work Plan were addressed and responses issued in four volumes: (1) Revised Work Plan Volume; (2) Comment Responses to USEPA; (3) Comment Responses to OEPA; and (4) Change Page Notices. These volumes were transmitted to EPA on August 24, 1987. A total revision of all Work Plan volumes is scheduled for completion in November 1987, following USEPA - Region 5 and Ohio EPA acceptance of comment resolution.

Percent Complete:
- Original Deliverable - Complete
- Comment Response - Complete
- Revised Deliverable - 50%

Task 3 - Site Investigation

Grid Survey - Stakes were placed at 31, one-thousand foot grid points and tied to the state planar coordinate system in the open area surrounding the production and waste pit areas.

Radiation Measurement Survey - Monitoring of the thousand foot grid points was started using the large volume Sodium Iodide detector to record high energy gamma radiation measurements. Eighteen of the one-thousand foot grid points were monitored, including the traverse lines between the grid points.

Groundwater and Subsurface Soils - Soil boring/monitoring well installation operations were started on August 24, 1987 at monitoring wells MW209 and MW266. Soil samples were collected continuously through the till and at five foot intervals in the sand and gravel aquifer beneath the till, using standard penetration testing (SPT) techniques. Each sample was screened in the field for volatile organics and alpha and gamma emissions upon recovery using an HNu volatile organics meter and Ludlum count rate meter respectively. Neither volatile organics nor alpha or gamma measurements have detected above background concentrations in any of the samples thus far collected. As of August 31, 1987 the soil borings have been advanced to a depth of 46 feet at MW266 and 30 feet at MW209.

A temporary decontamination facility was built next to the field trailers to clean sampling and drilling tools.

Biological Resources - Fish and benthic macroinvertebrates (aquatic insects, insect larvae, and other bottom-dwelling organisms), were collected from Paddy's Run and the Great Miami River. Samples were taken above the FMPC (updrainage) and various points below the FMPC (downdrainage) as follows:

- Paddy's Run at the railroad bridge crossing,
- Paddy's Run across from the storage silos,
- Paddy's Run at the SH 128 bridge,
- Great Miami River across from the Bolton Water Treatment Plant
- Great Miami River at the FMPC outfall,
- Great Miami River at the confluence of Paddy's Run, and
- Great Miami River below Miamitown.

The fish species collected using seines and an electroshocker included shad, channel catfish, various sunfish, white sucker, carp, creek chub, bluegill, and various minnows (primarily shiners and darters). These samples will be analyzed for bioaccumulation (tissue uptake) of radionuclides as defined in the Work Plan.

Bottom-dwelling organisms include various larval stages (instars) of a variety of insects, as well as other invertebrates including worms and snails. In some samples, small crayfish were also taken. These samples were collected with a Surber sampler, a 12" by 12" instrument where organisms are cleansed from rocks and mud, and swept into a net (fine mesh). Three Surber samples are combined for each site. Bottom-dwelling organisms are the primary food for many of the fish species that will be further analyzed.

Percent Complete: 12%

Task 4 - Site Investigation Analysis

Data Base - The environmental data base "Flow Gemini" was procured (licensed for use) along with the Contour Plotting System (CPS) and SAS graphics packages. User training was completed.

Air Modeling - No significant activity was scheduled. The protocol for using AIRDOS is being prepared.

Groundwater Modeling - The SWIFT-III computer code was acquired and installed on the PRIME computer. Data is being compiled for developing the model. Verification of the code was initiated.

Percent Complete: less than 5%

Tasks 5 and 6

No significant progress.

Task 7 - Program Management and Reports

Quality Assurance - A training seminar for all field personnel was held to instruct on the controls necessary to perform the project in a defined, systematic manner, including adequate provisions for changes. This three day training session was held to emphasize that quality is to be "built in" as part of the project rather than "after the fact." The training was re-emphasized in the field as the sampling teams arrived to begin work. Included was:

- The various forms that need to be filled out to maintain sufficient documentation;
- The unique sample numbers on the Sample Log forms; and
- The records management system.

Procedures were approved for the radiation measurements task, the surface soil sampling task, and for sample packaging. These procedures were written incorporating the Work Plan Revision (Task 2) and QAPP, including Change Pages, to provide a copy for the sampling team(s) to use in the field.

Percent Complete: Not applicable (apportioned effort).

Task 8 - Community Relations Support

The FMPC initiated preparation of a slide program which can be used to describe the following: FMPC history; what an RI/FS is; current actions under the RI/FS; what might some of the remedial actions be; and how the public gets involved.

Percent Complete: Less than 5%

Tasks 9 through 17

No significant progress

CHARACTERIZATION INVESTIGATION STUDY (CIS)

All radiological and chemical analysis of collected samples from the waste storage area were completed. Quality Assurance of radiological analysis is currently underway in the TMA Eberline Laboratory. The geographic data base was transferred to FMPC for use in RI/FS.

CIS final reports are being prepared. A three volume report to be completed defining all actions taken under the CIS. The draft Volume I - Geophysics Report to be transmitted to FMPC by 9/8/87. The draft Volume II - Chemical and Radiological Characterization of Waste Storage Facility to be transmitted to FMPC by 9/14/87. The draft of Volume III - Surface Radiological Characterization of Waste Storage Area to be transmitted to FMPC by 9/30/87. Issuance of the final CIS report volumes is anticipated in October, 1987.

DIFFICULTIES ENCOUNTERED

None

ACTIONS TAKEN TO RECTIFY PROBLEMS

None required

CHANGES IN PERSONNEL

Mr. Bob Galbraith, IT, has been designated as the new Technical Project Manger.

RESULTS OF SAMPLING

Test results from the RI field sampling are not yet available. As data becomes available, it will be reported in future Technical Information Exchange meetings.

PLANNED ACTIVITIES NEXT MONTH

- Continue installation of monitoring wells in accordance with the revised drilling sequence listed in Attachment #1. Mobilize a third drill rig to maintain schedule.
- Continue grid survey at one hundred foot - spacing in production, waste pits, and other areas.
- Start surface water and sediment sampling.
- Continue radiological sampling on the one thousand foot and the one hundred foot grids.
- Start loading of field data into database.
- Complete field QA audit of ongoing sampling programs.
- Complete Community Relations slide presentation.

Revision No. 1
August 31, 1987

FMPC SITEWIDE RI/FS
PROPOSED DRILLING SEQUENCE

WELL #	WELL #
266	135
209	137
109	125
366	178
124	181
265	182
165	183
249	176
145	177
148	175
146	172
147	131
116	173
114	174
118	130
179	141
128	139
129	104
132	127
180	108
111	142
152	110
134	138

Attachment #1